Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States* v. *Detroit Timber & Lumber Co.*, 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

ENTERGY CORP. *v.* RIVERKEEPER, INC., ET AL.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

No. 07–588. Argued December 2, 2008—Decided April 1, 2009*

Petitioners' powerplants have "cooling water intake structures" that threaten the environment by squashing against intake screens ("impingement") or suctioning into the cooling system ("entrainment") aquatic organisms from the water sources tapped to cool the plants. Thus, the facilities are subject to regulation under the Clean Water Act, which mandates that "[a]ny standard established pursuant to section 1311 . . . or section 1316 . . . and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." 33 U. S. C. §1326(b). Sections 1311 and 1316, in turn, employ a variety of "best technology" standards to regulate effluent discharge into the Nation's waters. The Environmental Protection Agency (EPA) promulgated the §1326(b) regulations at issue after nearly three decades of making the "best technology available" determination on a case-by-case basis. Its "Phase I" regulations govern new cooling water intake structures, while the "Phase II" rules at issue apply to certain large existing facilities. In the latter rules, the EPA set "national performance standards," requiring most Phase II facilities to reduce "impingement mortality for [aquatic organisms] by 80 to 95 percent from the calculation baseline," and requiring a subset of facilities to reduce entrainment of such organisms by "60 to 90 percent from [that] baseline." 40 CFR §125.94(b)(1), (2). However, the EPA expressly declined to mandate closed-cycle cooling systems, or equivalent re-

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*Together with No. 07–589, *PSEG Fossil LLC et al.* v. *Riverkeeper, Inc., et al.*, and No. 07–597, *Utility Water Act Group* v. *Riverkeeper, Inc., et al.*, also on certiorari to the same court.

ductions in impingement and entrainment, as it had done in its Phase I rules, in part because the cost of rendering existing facilities closed-cycle compliant would be nine times the estimated cost of compliance with the Phase II performance standards, and because other technologies could approach the performance of closed-cycle operation. The Phase II rules also permit site-specific variances from the national performance standards, provided that the permit-issuing authority imposes remedial measures that yield results "as close as practicable to the applicable performance standards." §125.94(a)(5)(i), (ii). Respondents—environmental groups and various States—challenged the Phase II regulations. Concluding that cost-benefit analysis is impermissible under 33 U. S. C. §1326(b), the Second Circuit found the site-specific cost-benefit variance provision unlawful and remanded the regulations to the EPA for it to clarify whether it had relied on cost-benefit analysis in setting the national performance standards.

Held: The EPA permissibly relied on cost-benefit analysis in setting the national performance standards and in providing for cost-benefit variances from those standards as part of the Phase II regulations. Pp. 7–16.

(a) The EPA's view that §1326(b)'s "best technology available for minimizing adverse environmental impact" standard permits consideration of the technology's costs and of the relationship between those costs and the environmental benefits produced governs if it is a reasonable interpretation of the statute—not necessarily the only possible interpretation, nor even the interpretation deemed *most* reasonable by the courts. *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837, 843–844. The Second Circuit took "best technology" to mean the technology that achieves the greatest reduction in adverse environmental impacts at a reasonable cost to the industry, but it may also describe the technology that *most efficiently* produces a good, even if it produces a lesser quantity of that good than other available technologies. This reading is not precluded by the phrase "for minimizing adverse environmental impact." Minimizing admits of degree and is not necessarily used to refer exclusively to the "greatest possible reduction." Other Clean Water Act provisions show that when Congress wished to mandate the greatest feasible reduction in water pollution, it used plain language, *e.g.*, "elimination of discharges of all pollutants," §1311(b)(2)(A). Thus, §1326(b)'s use of the less ambitious goal of "minimizing adverse environmental impact" suggests that the EPA has some discretion to determine the extent of reduction warranted under the circumstances, plausibly involving a consideration of the benefits derived from reductions and the costs of achieving them. Pp. 7–9.

Syllabus

(b) Considering §1326(b)'s text, and comparing it with the text and statutory factors applicable to parallel Clean Water Act provisions, prompts the conclusion that it was well within the bounds of reasonable interpretation for the EPA to conclude that cost-benefit analysis is not categorically forbidden. In the Phase II rules the EPA sought only to avoid extreme disparities between costs and benefits, limiting variances from Phase II's "national performance standards" to circumstances where the costs are "significantly greater than the benefits" of compliance. 40 CFR §125.94(a)(5)(ii). In defining "national performance standards" the EPA assumed the application of technologies whose benefits approach those estimated for closed-cycle cooling systems at a fraction of the cost. That the EPA has for over thirty years interpreted §1326(b) to permit a comparison of costs and benefits, while not conclusive, also tends to show that its interpretation is reasonable and hence a legitimate exercise of its discretion. Even respondents and the Second Circuit ultimately recognize that some comparison of costs and benefits is permitted. The Second Circuit held that §1326(b) mandates only those technologies whose costs can be reasonably borne by the industry. But whether it is reasonable to bear a particular cost can very well depend on the resulting benefits. Likewise, respondents concede that the EPA need not require that industry spend billions to save one more fish. This concedes the principle, and there is no statutory basis for limiting the comparison of costs and benefits to situations where the benefits are *de minimis* rather than significantly disproportionate. Pp. 9–16.

475 F. 3d 83, reversed and remanded.

SCALIA, J., delivered the opinion of the Court, in which ROBERTS, C. J., and KENNEDY, THOMAS, and ALITO, JJ., joined. BREYER, J., filed an opinion concurring in part and dissenting in part. STEVENS, J., filed a dissenting opinion, in which SOUTER and GINSBURG, JJ., joined.

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SUPREME COURT OF THE UNITED STATES

Nos. 07–588, 07–589 and 07–597

ENTERGY CORPORATION, PETITIONER
07–588 *v.*
RIVERKEEPER, INC., ET AL.

PSEG FOSSIL LLC, ET AL., PETITIONERS
07–589 *v.*
RIVERKEEPER, INC., ET AL.

UTILITY WATER ACT GROUP, PETITIONER
07–597 *v.*
RIVERKEEPER, INC., ET AL.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

[April 1, 2009]

JUSTICE SCALIA delivered the opinion of the Court.

These cases concern a set of regulations adopted by the Environmental Protection Agency (EPA or agency) under §316(b) of the Clean Water Act, 33 U. S. C. §1326(b). 69 Fed. Reg. 41576 (2004). Respondents—environmental groups and various States[1]—challenged those regulations, and the Second Circuit set them aside. *Riverkeeper, Inc.* v.

[1]The EPA and its Administrator appeared as respondents in support of petitioners. See Brief for Federal Parties as Respondents Supporting Petitioners. References to "respondents" throughout the opinion refer only to those parties challenging the EPA rules at issue in these cases.

EPA, 475 F. 3d 83, 99–100 (2007). The issue for our decision is whether, as the Second Circuit held, the EPA is not permitted to use cost-benefit analysis in determining the content of regulations promulgated under §1326(b).

I

Petitioners operate—or represent those who operate—large powerplants. In the course of generating power, those plants also generate large amounts of heat. To cool their facilities, petitioners employ "cooling water intake structures" that extract water from nearby water sources. These structures pose various threats to the environment, chief among them the squashing against intake screens (elegantly called "impingement") or suction into the cooling system ("entrainment") of aquatic organisms that live in the affected water sources. See 69 Fed. Reg. 41586. Accordingly, the facilities are subject to regulation under the Clean Water Act, 33 U. S. C. §1251 *et seq.*, which mandates:

> "Any standard established pursuant to section 1311 of this title or section 1316 of this title and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." §1326(b).

Sections 1311 and 1316, in turn, employ a variety of "best technology" standards to regulate the discharge of effluents into the Nation's waters.

The §1326(b) regulations at issue here were promulgated by the EPA after nearly three decades in which the determination of the "best technology available for minimizing [cooling water intake structures'] adverse environmental impact" was made by permit-issuing authorities on a case-by-case basis, without benefit of a governing

regulation. The EPA's initial attempt at such a regulation came to nought when the Fourth Circuit determined that the agency had failed to adhere to the procedural requirements of the Administrative Procedure Act. *Appalachian Power Co.* v. *Train*, 566 F. 2d 451, 457 (1977). The EPA withdrew the regulation, 44 Fed. Reg. 32956 (1979), and instead published "draft guidance" for use in implementing §1326(b)'s requirements via site-specific permit decisions under §1342. See EPA, Office of Water Enforcement Permits Div., {Draft} Guidance for Evaluating the Adverse Impact of Cooling Water Intake Structures on the Aquatic Environment: Section 316(b) P. L. 92–500, (May 1, 1977), at http://www.epa.gov/waterscience/316b/files/1977AEIguid.pdf, (all Internet materials as visited Mar. 30, 2009, and available in Clerk of Court's case file); 69 Fed. Reg. 41584 (describing system of case-by-case permits under the draft guidance).

In 1995, the EPA entered into a consent decree which, as subsequently amended, set a multiphase timetable for the EPA to promulgate regulations under §1326(b). See *Riverkeeper, Inc.* v. *Whitman*, No. 93 Civ. 0314 (AGS), 2001 WL 1505497, *1 (SDNY, Nov. 27, 2001). In the first phase the EPA adopted regulations governing certain new, large cooling water intake structures. 66 Fed. Reg. 65256 (2001) (Phase I rules); see 40 CFR §§125.80(a), 125.81(a) (2008). Those rules require new facilities with water-intake flow greater than 10 million gallons per day to, among other things, restrict their inflow "to a level commensurate with that which can be attained by a closed-cycle recirculating cooling water system."[2] §125.84(b)(1). New facilities with water-intake flow between 2 million

[2]Closed-cycle cooling systems recirculate the water used to cool the facility, and consequently extract less water from the adjacent waterway, proportionately reducing impingement and entrainment. *Riverkeeper, Inc.* v. *EPA*, 358 F. 3d 174, 182, n. 5 (CA2 2004); 69 Fed. Reg. 41601, and n. 44 (2004).

and 10 million gallons per day may alternatively comply by, among other things, reducing the volume and velocity of water removal to certain levels. §125.84(c). And all facilities may alternatively comply by demonstrating, among other things, "that the technologies employed will reduce the level of adverse environmental impact . . . to a comparable level" to what would be achieved by using a closed-cycle cooling system. §125.84(d). These regulations were upheld in large part by the Second Circuit in *Riverkeeper, Inc.* v. *EPA*, 358 F. 3d 174 (2004).

The EPA then adopted the so-called "Phase II" rules at issue here.[3] 69 Fed. Reg. 41576. They apply to existing facilities that are point sources, whose primary activity is the generation and transmission (or sale for transmission) of electricity, and whose water-intake flow is more than 50 million gallons of water per day, at least 25 percent of which is used for cooling purposes. *Ibid.* Over 500 facilities, accounting for approximately 53 percent of the Nation's electric-power generating capacity, fall within Phase II's ambit. See EPA, Economic and Benefits Analysis for the Final Section 316(b) Phase II Existing Facilities Rule, A3–13, Table A3–4 (Feb. 2004), online at http://www.epa.gov/waterscience/316b/phase2/econbenefits/final/a3.pdf. Those facilities remove on average more than 214 billion gallons of water per day, causing impingement and entrainment of over 3.4 billion aquatic organisms per year. 69 Fed. Reg. 41586.

To address those environmental impacts, the EPA set "national performance standards," requiring Phase II facilities (with some exceptions) to reduce "impingement mortality for all life stages of fish and shellfish by 80 to 95

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[3]The EPA has also adopted Phase III rules for facilities not subject to the Phase I and Phase II regulations. 71 Fed. Reg. 35006 (2006). A challenge to those regulations is currently before the Fifth Circuit, where proceedings have been stayed pending disposition of these cases. See *ConocoPhillips Co.* v. *EPA*, No. 06–60662.

percent from the calculation baseline"; a subset of facilities must also reduce entrainment of such aquatic organisms by "60 to 90 percent from the calculation baseline." 40 CFR §125.94(b)(1), (2); see §125.93 (defining "calculation baseline"). Those targets are based on the environmental improvements achievable through deployment of a mix of remedial technologies, 69 Fed. Reg. 41599, which the EPA determined were "commercially available and economically practicable," *id.*, at 41602.

In its Phase II rules, however, the EPA expressly declined to mandate adoption of closed-cycle cooling systems or equivalent reductions in impingement and entrainment, as it had done for new facilities subject to the Phase I rules. *Id.*, at 41601. It refused to take that step in part because of the "generally high costs" of converting existing facilities to closed-cycle operation, and because "other technologies approach the performance of this option." *Id.*, at 41605. Thus, while closed-cycle cooling systems could reduce impingement and entrainment mortality by up to 98 percent, *id.*, at 41601, (compared to the Phase II targets of 80 to 95 percent impingement reduction), the cost of rendering all Phase II facilities closed-cycle-compliant would be approximately $3.5 billion per year, *id.*, at 41605, nine times the estimated cost of compliance with the Phase II performance standards, *id.*, at 41666. Moreover, Phase II facilities compelled to convert to closed-cycle cooling systems "would produce 2.4 percent to 4.0 percent less electricity even while burning the same amount of coal," possibly requiring the construction of "20 additional 400–MW plants . . . to replace the generating capacity lost." *Id.*, at 41605. The EPA thus concluded that "[a]lthough not identical, the ranges of impingement and entrainment reduction are similar under both options. . . . [Benefits of compliance with the Phase II rules] can approach those of closed-cycle recirculating at less cost with fewer implementation problems." *Id.*, at 41606.

The regulations permit the issuance of site-specific variances from the national performance standards if a facility can demonstrate either that the costs of compliance are "significantly greater than" the costs considered by the agency in setting the standards, 40 CFR §125.94(a)(5)(i), or that the costs of compliance "would be significantly greater than the benefits of complying with the applicable performance standards," §125.94(a)(5)(ii). Where a variance is warranted, the permit-issuing authority must impose remedial measures that yield results "as close as practicable to the applicable performance standards." §125.94(a)(5)(i), (ii).

Respondents challenged the EPA's Phase II regulations, and the Second Circuit granted their petition for review and remanded the regulations to the EPA. The Second Circuit identified two ways in which the EPA could permissibly consider costs under 33 U. S. C. §1326(b): (1) in determining whether the costs of remediation "can be 'reasonably borne' by the industry," and (2) in determining which remedial technologies are the most cost-effective, that is, the technologies that reach a specified level of benefit at the lowest cost. 475 F. 3d, at 99–100. See also *id.*, at 98, and n. 10. It concluded, however, that cost-benefit analysis, which "compares the costs and benefits of various ends, and chooses the end with the best net benefits," *id.*, at 98, is impermissible under §1326(b), *id.*, at 100.

The Court of Appeals held the site-specific cost-benefit variance provision to be unlawful. *Id.*, at 114. Finding it unclear whether the EPA had relied on cost-benefit analysis in setting the national performance standards, or had only used cost-effectiveness analysis, it remanded to the agency for clarification of that point. *Id.*, at 104–105. (The remand was also based on other grounds which are not at issue here.) The EPA suspended operation of the Phase II rules pending further rulemaking. 72 Fed. Reg.

37107 (2007). We then granted certiorari limited to the following question: "Whether [§1326(b)] . . . authorizes the [EPA] to compare costs with benefits in determining 'the best technology available for minimizing adverse environmental impact' at cooling water intake structures." 552 U. S. ___ (2008).

II

In setting the Phase II national performance standards and providing for site-specific cost-benefit variances, the EPA relied on its view that §1326(b)'s "best technology available" standard permits consideration of the technology's costs, 69 Fed. Reg. 41626, and of the relationship between those costs and the environmental benefits produced, *id.*, at 41603. That view governs if it is a reasonable interpretation of the statute—not necessarily the only possible interpretation, nor even the interpretation deemed *most* reasonable by the courts. *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837, 843–844 (1984).[4]

As we have described, §1326(b) instructs the EPA to set standards for cooling water intake structures that reflect "the best technology available for minimizing adverse environmental impact." The Second Circuit took that

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[4]The dissent finds it "puzzling" that we invoke this proposition (that a reasonable agency interpretation prevails) at the "outset," omitting the supposedly prior inquiry of "'whether Congress has directly spoken to the precise question at issue.'" *Post*, at 6, n. 5 (opinion of STEVENS, J.) (quoting *Chevron*, 467 U. S., at 842). But surely if Congress has directly spoken to an issue then any agency interpretation contradicting what Congress has said would be unreasonable.

What is truly "puzzling" is the dissent's accompanying charge that the Court's failure to conduct the *Chevron* step-one inquiry at the outset "reflects [its] reluctance to consider the possibility . . . that Congress' silence may have meant to foreclose cost-benefit analysis." *Post*, at 6, n. 5. Our discussion of that issue, *infra*, at 11, speaks for itself.

language to mean the technology that achieves the greatest reduction in adverse environmental impacts at a cost that can reasonably be borne by the industry. 475 F. 3d, at 99–100. That is certainly a plausible interpretation of the statute. The "best" technology—that which is "most advantageous," Webster's New International Dictionary 258 (2d ed. 1953)—may well be the one that produces the most of some good, here a reduction in adverse environmental impact. But "best technology" may also describe the technology that *most efficiently* produces some good. In common parlance one could certainly use the phrase "best technology" to refer to that which produces a good at the lowest per-unit cost, even if it produces a lesser quantity of that good than other available technologies.

Respondents contend that this latter reading is precluded by the statute's use of the phrase "for minimizing adverse environmental impact." Minimizing, they argue, means reducing to the smallest amount possible, and the "best technology available for minimizing adverse environmental impacts," must be the economically feasible technology that achieves the greatest possible reduction in environmental harm. Brief for Respondents Riverkeeper, Inc. et al. 25–26. But "minimize" is a term that admits of degree and is not necessarily used to refer exclusively to the "greatest possible reduction." For example, elsewhere in the Clean Water Act, Congress declared that the procedures implementing the Act "shall encourage the drastic minimization of paperwork and interagency decision procedures." 33 U. S. C. §1251(f). If respondents' definition of the term "minimize" is correct, the statute's use of the modifier "drastic" is superfluous.

Other provisions in the Clean Water Act also suggest the agency's interpretation. When Congress wished to mandate the greatest feasible reduction in water pollution, it did so in plain language: The provision governing the discharge of toxic pollutants into the Nation's waters

requires the EPA to set "effluent limitations [which] shall require the *elimination* of discharges of all pollutants if the Administrator finds . . . that such elimination is technologically and economically achievable," §1311(b)(2)(A) (emphasis added). See also §1316(a)(1) (mandating "where practicable, a standard [for new point sources] permitting *no discharge* of pollutants" (emphasis added)). Section 1326(b)'s use of the less ambitious goal of "minimizing adverse environmental impact" suggests, we think, that the agency retains some discretion to determine the extent of reduction that is warranted under the circumstances. That determination could plausibly involve a consideration of the benefits derived from reductions and the costs of achieving them. Cf. 40 CFR §125.83 (defining "minimize" for purposes of the Phase I regulations as "reduc[ing] to the smallest amount, extent, or degree reasonably possible"). It seems to us, therefore, that the phrase "best technology available," even with the added specification "for minimizing adverse environmental impact," does not unambiguously preclude cost-benefit analysis.[5]

Respondents' alternative (and, alas, also more complex) argument rests upon the structure of the Clean Water Act. The Act provided that during its initial implementation period existing "point sources"—discrete conveyances from which pollutants are or may be discharged, 33 U. S. C. §1362(14)—were subject to "effluent limitations . . . which shall require the application of the *best practicable control technology* currently available." §1311(b)(1)(A) (emphasis

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[5]Respondents concede that the term "available" is ambiguous, as it could mean either technologically feasible or economically feasible. But any ambiguity in the term "available" is largely irrelevant. Regardless of the criteria that render a technology "available," the EPA would still have to determine which available technology is the "best" one. And as discussed above, that determination may well involve consideration of the technology's relative costs and benefits.

added). (We shall call this the "BPT" test.) Following that transition period, the Act initially mandated adoption, by July 1, 1983 (later extended to March 31, 1989), of stricter effluent limitations requiring "application of the *best available technology economically achievable* for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants." §1311(b)(2)(A) (emphasis added); see *EPA* v. *National Crushed Stone Assn.*, 449 U. S. 64, 69–70 (1980). (We shall call this the "BATEA" test.) Subsequent amendment limited application of this standard to toxic and nonconventional pollutants, and for the remainder established a (presumably laxer) test of "best conventional-pollutant control technology." §1311(b)(2)(E).[6] (We shall call this "BCT.") Finally, §1316 subjected certain categories of new point sources to "the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the *best available demonstrated control technology*." §1316(a)(1) (emphasis added); §1316(b)(1)(B). (We shall call this the "BADT" test.) The provision at issue here, applicable not to effluents but to cooling water intake structures, requires, as we have described, "the *best technology available for minimizing adverse environmental impact*," §1326(b) (emphasis added). (We shall call this the "BTA" test.)

The first four of these tests are elucidated by statutory factor lists that guide their implementation. To take the standards in (presumed) order of increasing stringency, see *Crushed Stone, supra,* at 69–70: In applying the BPT test the EPA is instructed to consider, among other factors, "the total cost of application of technology in relation

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[6]The statute does not contain a hyphen between the words "conventional" and "pollutant." "Conventional pollutant" is a statutory term, however, see 33 U. S. C. §1314(a)(4), and it is clear that in §1311(b)(2)(E) the adjective modifies "pollutant" rather than "control technology." The hyphen makes that clear.

to the effluent reduction benefits to be achieved." §1314(b)(1)(B). In applying the BCT test it is instructed to consider "the *reasonableness of the relationship* between the costs of attaining a reduction in effluents and the effluent reduction benefits derived." §1314(b)(4)(B) (emphasis added). And in applying the BATEA and BADT tests the EPA is instructed to consider the "cost of achieving such effluent reduction." §§1314(b)(2)(B), 1316(b)(1)(B). There is no such elucidating language applicable to the BTA test at issue here. To facilitate comparison, the texts of these five tests, the clarifying factors applicable to them, and the entities to which they apply are set forth in the Appendix, *infra*.

The Second Circuit, in rejecting the EPA's use of cost-benefit analysis, relied in part on the propositions that (1) cost-benefit analysis is precluded under the BATEA and BADT tests; and (2) that, insofar as the permissibility of cost-benefit analysis is concerned, the BTA test (the one at issue here) is to be treated the same as those two. See 475 F. 3d, at 98. It is not obvious to us that the first of these propositions is correct, but we need not pursue that point, since we assuredly do not agree with the second. It is certainly reasonable for the agency to conclude that the BTA test need not be interpreted to permit only what those other two tests permit. Its text is not identical to theirs. It has the relatively modest goal of "minimizing adverse environmental impact" as compared with the BATEA's goal of "eliminating the discharge of all pollutants." And it is unencumbered by specified statutory factors of the sort provided for those other two tests, which omission can reasonably be interpreted to suggest that the EPA is accorded greater discretion in determining its precise content.

Respondents and the dissent argue that the mere fact that §1326(b) does not expressly authorize cost-benefit analysis for the BTA test, though it does so for two of the

other tests, displays an intent to forbid its use. This surely proves too much. For while it is true that two of the other tests authorize cost-benefit analysis, it is also true that *all four* of the other tests expressly authorize *some* consideration of costs. Thus, if respondents' and the dissent's conclusion regarding the import of §1326(b)'s silence is correct, it is *a fortiori* true that the BTA test permits *no consideration of cost whatsoever*, not even the "cost-effectiveness" and "feasibility" analysis that the Second Circuit approved, see *supra*, at 6, that the dissent would approve, *post*, at 1–2, and that respondents acknowledge. The inference that respondents and the dissent would draw from the silence is, in any event, implausible, as §1326(b) is silent not only with respect to cost-benefit analysis but with respect to all potentially relevant factors. If silence here implies prohibition, then the EPA could not consider *any* factors in implementing §1326(b)—an obvious logical impossibility. It is eminently reasonable to conclude that §1326(b)'s silence is meant to convey nothing more than a refusal to tie the agency's hands as to whether cost-benefit analysis should be used, and if so to what degree.

Contrary to the dissent's suggestion, see *post*, at 3–4, our decisions in *Whitman* v. *American Trucking Assns., Inc.*, 531 U. S. 457 (2001), and *American Textile Mfrs. Institute, Inc.* v. *Donovan*, 452 U. S. 490 (1981), do not undermine this conclusion. In *American Trucking*, we held that the text of §109 of the Clean Air Act, "interpreted in its statutory and historical context . . . unambiguously bars cost considerations" in setting air quality standards under that provision. 531 U. S., at 471. The relevant "statutory context" included other provisions in the Clean Air Act that expressly authorized consideration of costs, whereas §109 did not. *Id.*, at 467–468. *American Trucking* thus stands for the rather unremarkable proposition that sometimes statutory silence, when viewed in

context, is best interpreted as limiting agency discretion. For the reasons discussed earlier, §1326(b)'s silence cannot bear that interpretation.

In *American Textile*, the Court relied in part on a statute's failure to mention cost-benefit analysis in holding that the relevant agency was not required to engage in cost-benefit analysis in setting certain health and safety standards. 452 U. S., at 510–512. But under *Chevron*, that an agency is not *required* to do so does not mean that an agency is not *permitted* to do so.

This extended consideration of the text of §1326(b), and comparison of that with the text and statutory factors applicable to four parallel provisions of the Clean Water Act, lead us to the conclusion that it was well within the bounds of reasonable interpretation for the EPA to conclude that cost-benefit analysis is not categorically forbidden. Other arguments may be available to preclude such a rigorous form of cost-benefit analysis as that which was prescribed under the statute's former BPT standard, which required weighing "the total cost of application of technology" against "the . . . benefits to be achieved." See, *supra*, at 10. But that question is not before us.

In the Phase II requirements challenged here the EPA sought only to avoid extreme disparities between costs and benefits. The agency limited variances from the Phase II "national performance standards" to circumstances where the costs are "significantly greater than the benefits" of compliance. 40 CFR §125.94(a)(5)(ii). In defining the "national performance standards" themselves the EPA assumed the application of technologies whose benefits "approach those estimated" for closed-cycle cooling systems at a fraction of the cost: $389 million per year, 69 Fed. Reg. 41666, as compared with (1) at least $3.5 billion per year to operate compliant closed-cycle cooling systems, *id.*, at 41605 (or $1 billion per year to impose similar requirements on a subset of Phase II facilities, *id.*, at

41606), and (2) significant reduction in the energy output of the altered facilities, *id.*, at 41605. And finally, EPA's assessment of the relatively meager financial benefits of the Phase II regulations that it adopted—reduced impingement and entrainment of 1.4 billion aquatic organisms, *id.*, at 41661, Exh. XII–6, with annualized use-benefits of $83 million, *id.*, at 41662, and non-use benefits of indeterminate value, *id.*, at 41660–41661—when compared to annual costs of $389 million, demonstrates quite clearly that the agency did not select the Phase II regulatory requirements because their benefits equaled their costs.

While not conclusive, it surely tends to show that the EPA's current practice is a reasonable and hence legitimate exercise of its discretion to weigh benefits against costs that the agency has been proceeding in essentially this fashion for over 30 years. See *Alaska Dept. of Environmental Conservation* v. *EPA*, 540 U. S. 461, 487 (2004); *Barnhart* v. *Walton*, 535 U. S. 212, 219–220 (2002). As early as 1977, the agency determined that, while §1326(b) does not *require* cost-benefit analysis, it is also not reasonable to "interpret Section [1326(b)] as requiring use of technology whose cost is wholly disproportionate to the environmental benefit to be gained." *In re Public Service Co. of New Hampshire*, 1 E. A. D. 332, 340 (1977). See also *In re Central Hudson Gas and Electric Corp.*, EPA Decision of the General Counsel, NPDES Permits, No. 63, pp. 371, 381 (July 29, 1977) ("EPA ultimately must demonstrate that the present value of the cumulative annual cost of modifications to cooling water intake structures is not wholly out of proportion to the magnitude of the estimated environmental gains"); *Seacoast Anti-Pollution League* v. *Costle*, 597 F. 2d 306, 311 (CA1 1979) (rejecting challenge to an EPA permit decision that was based in part on the agency's determination that further restrictions would be "'wholly disproportionate to any environmental benefit'"). While the EPA's prior "wholly dispro-

portionate" standard may be somewhat different from its current "significantly greater than" standard, there is nothing in the statute that would indicate that the former is a permissible interpretation while the latter is not.

Indeed, in its review of the EPA's Phase I regulations, the Second Circuit seemed to recognize that §1326(b) permits some form of cost-benefit analysis. In considering a challenge to the EPA's rejection of dry cooling systems[7] as the "best technology available" for Phase I facilities the Second Circuit noted that "while it certainly sounds substantial that dry cooling is 95 percent more effective than closed-cycle cooling, it is undeniably relevant that that difference represents a relatively small improvement over closed-cycle cooling at a very significant cost." *Riverkeeper*, 358 F. 3d, at 194, n. 22. And in the decision below rejecting the use of cost-benefit analysis in the Phase II regulations, the Second Circuit nonetheless interpreted "best technology available" as mandating only those technologies that can "be reasonably borne by the industry." 475 F. 3d, at 99. But whether it is "reasonable" to bear a particular cost may well depend on the resulting benefits; if the only relevant factor was the feasibility of the costs, their reasonableness would be irrelevant.

In the last analysis, even respondents ultimately recognize that some form of cost-benefit analysis is permissible. They acknowledge that the statute's language is "plainly not so constricted as to require EPA to require industry petitioners to spend billions to save one more fish or plankton." Brief for Respondents Riverkeeper, Inc. et al. 29. This concedes the principle—the permissibility of at least some cost-benefit analysis—and we see no statutory basis for limiting its use to situations where the benefits

[7] Dry cooling systems use air drafts to remove heat, and accordingly remove little or no water from surrounding water sources. See 66 Fed. Reg. 65282 (2001).

are *de minimis* rather than significantly disproportionate.

* * *

We conclude that the EPA permissibly relied on cost-benefit analysis in setting the national performance standards and in providing for cost-benefit variances from those standards as part of the Phase II regulations. The Court of Appeals' reliance in part on the agency's use of cost-benefit analysis in invalidating the site-specific cost-benefit variance provision, 475 F. 3d, at 114, was therefore in error, as was its remand of the national performance standards for clarification of whether cost-benefit analysis was impermissibly used, *id.*, at 104–105. We of course express no view on the remaining bases for the Second Circuit's remand which did not depend on the permissibility of cost-benefit analysis. See *id.*, at 108, 110, 113, 115, 117, 120.[8] The judgment of the Court of Appeals is reversed, and the cases are remanded for further proceedings consistent with this opinion.

It is so ordered.

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[8]JUSTICE BREYER would remand for the additional reason of what he regards as the agency's inadequate explanation of the change in its criterion for variances—from a relationship of costs to benefits that is "'wholly disproportionate'" to one that is "'significantly greater.'" *Post*, at 7–8 (opinion concurring in part and dissenting in part). That question can have no bearing upon whether the EPA can use cost-benefit analysis, which is the only question presented here. It seems to us, in any case, that the EPA's explanation was ample. It explained that the "wholly out of proportion" standard was inappropriate for the existing facilities subject to the Phase II rules because those facilities lack "the greater flexibility available to new facilities for selecting the location of their intakes and installing technologies at lower costs relative to the costs associated with retrofitting existing facilities," and because "economically impracticable impacts on energy prices, production costs, and energy production . . . could occur if large numbers of Phase II existing facilities incurred costs that were more than 'significantly greater' than but not 'wholly out of proportion' to the costs in the EPA's record." 68 Fed. Reg. 13541 (2003).

APPENDIX TO OPINION OF THE COURT

Statutory Standard	Statutorily Mandated Factors	Entities Subject to Regulation
BPT: "[E]ffluent limitations . . . which shall require the application of the *best practicable control technology currently available*." 33 U. S. C. §1311(b)(1)(A) (emphasis added).	"Factors relating to the assessment of best practicable control technology currently available . . . shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved." 33 U. S. C. §1314(b)(1)(B).	Existing point sources during the Clean Water Act's initial implementation phase.
BCT: "[E]ffluent limitations . . . which shall require application of the *best conventional pollutant control technology*." 33 U. S. C. §1311(b)(2)(E) (emphasis added).	"Factors relating to the assessment of best conventional pollutant control technology . . . shall include consideration of the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived." 33 U. S. C. §1314(b)(4)(B).	Existing point sources that discharge "conventional pollutants" as defined by the EPA under 33 U. S. C. §1314(a)(4).
BATEA: "[E]ffluent limitations . . . which . . . shall require application of the *best available technology economically achievable* . . . which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants." 33 U. S. C. §1311(b)(2)(A) (emphasis added).	"Factors relating to the assessment of best available technology shall take into account . . . the cost of achieving such effluent reduction." 33 U. S. C. §1314(b)(2)(B).	Existing point sources that discharge toxic pollutants and non-conventional pollutants.

Appendix to opinion of the Court

Statutory Standard	**Statutorily Mandated Factors**	**Entities Subject to Regulation**
BADT: "[A] standard for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction with the Administrator determines to be achievable through application of the *best available demonstrated control technology*." 33 U. S. C. §1316(a)(1) (emphasis added).	"[T]he Administrator shall take into consideration the cost of achieving such effluent reduction, and any non-water quality environmental impact and energy requirements." 33 U. S. C. §1316(b)(1)(B).	New point sources within the categories of sources identified by the EPA under 33 U. S. C. §1316(b)(1)(A).
BTA: "Any standard . . . applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." 33 U. S. C. §1326(b).	N/A	Point sources that operate cooling water intake structures.

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UTILITY WATER ACT GROUP, PETITIONER
07–597 *v.*
RIVERKEEPER, INC., ET AL.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

[April 1, 2009]

JUSTICE BREYER, concurring in part and dissenting in part.

I agree with the Court that the relevant statutory language authorizes the Environmental Protection Agency (EPA) to compare costs and benefits. *Ante*, at 7–13. Nonetheless the drafting history and legislative history of related provisions, Pub. L. 92–500, §§301, 304, 86 Stat. 844, 850, as amended, 33 U. S. C. §§1311, 1314, make clear that those who sponsored the legislation intended the law's text to be read as restricting, though not forbidding, the use of cost-benefit comparisons. And I would apply that text accordingly.

I

Section 301 provides that, not later than 1977, effluent

limitations for point sources shall require the application of "*best practicable* control technology," §301(b)(1)(A), 86 Stat. 845 (emphasis added); and that, not later than 1983 (later extended to 1989), effluent limitations for categories and classes of point sources shall require application of the "*best available* technology economically achievable," §301(b)(2)(A), *ibid.* (emphasis added). Section 304(b), in turn, identifies the factors that the Agency shall take into account in determining (1) "*best practicable* control technology" and (2) "*best available* technology." 86 Stat. 851 (emphasis added).

With respect to the first, the statute provides that the factors taken into account by the Agency "shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application . . . and such other factors as the Administrator deems appropriate." §304(b)(1)(B), *ibid.* With respect to the second, the statute says that the Agency "shall take into account . . . the cost of achieving such effluent reduction" and "such other factors as the Administrator deems appropriate." §304(b)(2)(B), *ibid.*

The drafting history makes clear that the statute reflects a compromise. In the House version of the legislation, the Agency was to consider "the cost and the economic, social, and environmental impact of achieving such effluent reduction" when determining both "*best practicable*" and "*best available*" technology. H. R. 11896, 92d Cong., 2d Sess., §§304(b)(1)(B), (b)(2)(B) (1972) (as reported from committee). The House Report explained that the "*best available* technology" standard was needed—as opposed to mandating the elimination of discharge of pollutants—because "the difference in the cost of 100 percent elimination of pollutants as compared to the cost of removal of 97–99 percent of the pollutants in an effluent can far exceed any reasonable benefit to be achieved. In most cases, the cost of removal of the last few percentage

points increases expo[n]entially." H. R. Rep. No. 92–911, p. 103 (1972).

In the Senate version, the Agency was to consider "the cost of achieving such effluent reduction" when determining both "*best practicable*" and "*best available*" technology. S. 2770, 92d Cong., 1st Sess., §§304(b)(1)(B), (b)(2)(B) (1971) (as reported from committee). The Senate Report explains that "the technology must be available at a cost . . . which the Administrator determines to be reasonable." S. Rep. No. 92–414, p. 52 (1971) (hereinafter S. Rep.). But it said nothing about comparing costs and benefits.

The final statute reflects a modification of the House's language with respect to "*best practicable*," and an adoption of the Senate's language with respect to "*best available*." S. Conf. Rep. No. 92–1236, pp. 124–125 (1972). The final statute does not *require* the Agency to compare costs to benefits when determining "*best available* technology," but neither does it expressly *forbid* such a comparison.

The strongest evidence in the legislative history supporting the respondents' position—namely, that Congress intended to forbid comparisons of costs and benefits when determining the "*best available* technology"—can be found in a written discussion of the Act's provisions distributed to the Senate by Senator Edmund Muskie, the Act's principal sponsor, when he submitted the Conference Report for the Senate's consideration. 118 Cong. Rec. 33693 (1972). The relevant part of that discussion points out that, as to "*best practicable* technology," the statute requires application of a "balancing test between total cost and effluent reduction benefits." *Id.*, at 33696; see §304(b)(1)(B). But as to "*best available* technology," it states: "While cost should be a factor in the Administrator's judgment, no balancing test will be required." *Ibid.*; see §304(b)(2)(B). And Senator Muskie's discussion later speaks of the agency "evaluat[ing] . . . what needs to be done" to eliminate pollutant discharge and "what is

achievable," both "without regard to cost." *Ibid.*

As this language suggests, the Act's sponsors had reasons for minimizing the EPA's investigation of, and reliance upon, cost-benefit comparisons. The preparation of formal cost-benefit analyses can take too much time, thereby delaying regulation. And the sponsors feared that such analyses would emphasize easily quantifiable factors over more qualitative factors (particularly environmental factors, for example, the value of preserving nonmarketable species of fish). See S. Rep., at 47. Above all, they hoped that minimizing the use of cost-benefit comparisons would force the development of cheaper control technologies; and doing so, whatever the initial inefficiencies, would eventually mean cheaper, more effective cleanup. See *id.*, at 50–51.

Nonetheless, neither the sponsors' language nor the underlying rationale requires the Act to be read in a way that would *forbid* cost-benefit comparisons. Any such total prohibition would be difficult to enforce, for every real choice requires a decisionmaker to weigh advantages against disadvantages, and disadvantages can be seen in terms of (often quantifiable) costs. Moreover, an absolute prohibition would bring about irrational results. As the respondents themselves say, it would make no sense to require plants to "spend billions to save one more fish or plankton." Brief for Respondents Riverkeeper, Inc., et al. 29. That is so even if the industry might somehow afford those billions. And it is particularly so in an age of limited resources available to deal with grave environmental problems, where too much wasteful expenditure devoted to one problem may well mean considerably fewer resources available to deal effectively with other (perhaps more serious) problems.

Thus Senator Muskie used nuanced language, which one can read as leaving to the Agency a degree of authority to make cost-benefit comparisons in a manner that is

sensitive both to the need for such comparisons and to the concerns that the law's sponsors expressed. The relevant statement begins by listing various factors that the statute *requires* the Administrator to take into account when applying the phrase "practicable" to "classes and categories." 118 Cong. Rec. 33696. It states that, when doing so, the Administrator *must* apply (as the statute specifies) a "balancing test between total cost and effluent reduction benefits." *Ibid.* At the same time, it seeks to reduce the likelihood that the Administrator will place too much weight upon high costs by adding that the balancing test "is intended to limit the application of technology only where the additional degree of effluent reduction is wholly out of proportion to the costs of achieving" a "marginal level of reduction." *Ibid.*

Senator Muskie's statement then considers the "*different test*" that the statute requires the Administrator to apply when determining the "'*best available*'" technology. *Ibid.* (emphasis added). Under that test, the Administrator "may consider a broader range of technological alternatives." *Ibid.* And in determining what is "'*best available*' for a category or class, the Administrator is expected to apply the same principles involved in making the determination of '*best practicable*' . . . except as to cost-benefit analysis." *Ibid.* (emphasis added). That is, "[w]hile cost should be a factor . . . no balancing test will be *required*." *Ibid.* (emphasis added). Rather, "*[t]he Administrator will be bound by a test of reasonableness.*" *Ibid.* (emphasis added). The statement adds that the "'*best available*'" standard "is intended to reflect the need to press toward increasingly higher levels of control." *Ibid.* (emphasis added). And "the reasonableness of what is 'economically achievable' should *reflect* an evaluation of what needs to be done to move toward the elimination of the discharge of pollutants and what is achievable through the application of available technology—without regard to cost." *Ibid.*

(emphasis added).

I believe, as I said, that this language is deliberately nuanced. The statement says that where the statute uses the term "*best practicable,*" the statute *requires* comparisons of costs and benefits; but where the statute uses the term "*best available,*" such comparisons are not "*required.*" *Ibid.* (emphasis added). Senator Muskie does not say that all efforts to compare costs and benefits are *forbidden.*

Moreover, the statement points out that where the statute uses the term "*best available,*" the Administrator "will be bound by a test of *reasonableness.*" *Ibid.* (emphasis added). It adds that the Administrator should apply this test in a way that *reflects* its ideal objective, moving as closely as is technologically possible to the elimination of pollution. It thereby says the Administrator should consider, *i.e.*, take into account, how much pollution would still remain if the *best available* technology were to be applied everywhere—"without regard to cost." *Ibid.* It does not say that the Administrator *must* set the standard based solely on the result of that determination. (It would be difficult to reconcile the alternative, more absolute reading of this language with the Senator's earlier "test of reasonableness.")

I say that one *may,* not that one *must,* read Senator Muskie's statement this way. But to read it differently would put the Agency in conflict with the test of reasonableness by threatening to impose massive costs far in excess of any benefit. For 30 years the EPA has read the statute and its history in this way. The EPA has thought that it would not be "reasonable to interpret Section 316(b) as requiring use of technology whose cost is *wholly disproportionate* to the environmental benefit to be gained." *In re Pub. Serv. Co. of N. H. (Seabrook Station, Units 1 and 2),* 1 E. A. D. 332, 340 (1977), remanded on other grounds, *Seacoast Anti-Pollution League* v. *Costle,* 572 F. 2d 872 (CA1 1978) (emphasis added); see also *In re*

Central Hudson Gas & Elec. Corp., EPA Decision of the General Counsel, NPDES Permits, No. 63, p. 371 (July 29, 1977) (also applying a "wholly disproportionate" test); *In re Pub. Serv. Co. of N. H.*, 1 E. A. D. 455 (1978) (same). "[T]his Court will normally accord particular deference to an agency interpretation of 'longstanding' duration." *Barnhart* v. *Walton*, 535 U. S. 212, 220 (2002). And for the last 30 years, the EPA has given the statute a permissive reading without suggesting that in doing so it was ignoring or thwarting the intent of the Congress that wrote the statute.

The EPA's reading of the statute would seem to permit it to describe environmental benefits in non-monetized terms and to evaluate both costs and benefits in accordance with its expert judgment and scientific knowledge. The Agency can thereby avoid lengthy formal cost-benefit proceedings and futile attempts at comprehensive monetization, see 69 Fed. Reg. 41661–41662; take account of Congress' technology-forcing objectives; and still prevent results that are absurd or unreasonable in light of extreme disparities between costs and benefits. This approach, in my view, rests upon a "reasonable interpretation" of the statute—legislative history included. Hence it is lawful. *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837, 844 (1984). Most of what the majority says is consistent with this view, and to that extent I agree with its opinion.

II

The cases before us, however, present an additional problem. We here consider a rule that permits variances from national standards if a facility demonstrates that its costs would be "significantly greater than the benefits of complying." 40 CFR §125.94(a)(5)(ii) (2008). The words "significantly greater" differ from the words the EPA has traditionally used to describe its standard, namely,

"wholly disproportionate." Perhaps the EPA does not mean to make much of that difference. But if it means the new words to set forth a new and different test, the EPA must adequately explain why it has changed its standard. *Motor Vehicle Mfrs. Assn. of United States, Inc.* v. *State Farm Mut. Automobile Ins. Co.*, 463 U. S. 29, 42–43 (1983); *National Cable & Telecommunications Assn.* v. *Brand X Internet*, 545 U. S. 967, 981 (2005); *Thomas Jefferson Univ.* v. *Shalala*, 512 U. S. 504, 524, n. 3 (1994) (THOMAS, J., dissenting).

I am not convinced the EPA has successfully explained the basis for the change. It has referred to the fact that existing facilities have less flexibility than new facilities with respect to installing new technologies, and it has pointed to special, energy-related impacts of regulation. 68 Fed. Reg. 13541 (2003) (proposed rule). But it has not explained why the traditional "wholly disproportionate" standard cannot do the job now, when the EPA has used that standard (for existing facilities and otherwise) with apparent success in the past. See, *e.g.*, *Central Hudson*, *supra*.

Consequently, like the majority, I would remand these cases to the Court of Appeals. But unlike the majority I would permit that court to remand the cases to the EPA so that the EPA can either apply its traditional "wholly disproportionate" standard or provide an adequately reasoned explanation for the change.

SUPREME COURT OF THE UNITED STATES

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ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

[April 1, 2009]

JUSTICE STEVENS, with whom JUSTICE SOUTER and JUSTICE GINSBURG join, dissenting.

Section 316(b) of the Clean Water Act (CWA), 33 U. S. C. §1326(b), which governs industrial powerplant water intake structures, provides that the Environmental Protection Agency (EPA or Agency) "shall require" that such structures "reflect the best technology available for minimizing adverse environmental impact." The EPA has interpreted that mandate to authorize the use of cost-benefit analysis in promulgating regulations under §316(b). For instance, under the Agency's interpretation, technology that would otherwise qualify as the best available need not be used if its costs are "significantly greater than the benefits" of compliance. 40 CFR §125.94(a)(5)(ii) (2008).

Like the Court of Appeals, I am convinced that the EPA has misinterpreted the plain text of §316(b). Unless costs are so high that the best technology is not "available," Congress has decided that they are outweighed by the benefits of minimizing adverse environmental impact. Section 316(b) neither expressly nor implicitly authorizes the EPA to use cost-benefit analysis when setting regulatory standards; fairly read, it prohibits such use.

I

As typically performed by the EPA, cost-benefit analysis requires the Agency to first monetize the costs and benefits of a regulation, balance the results, and then choose the regulation with the greatest net benefits. The process is particularly controversial in the environmental context in which a regulation's financial costs are often more obvious and easier to quantify than its environmental benefits. And cost-benefit analysis often, if not always, yields a result that does not maximize environmental protection.

For instance, although the EPA estimated that water intake structures kill 3.4 billion fish and shellfish each year,[1] see 69 Fed. Reg. 41586, the Agency struggled to calculate the value of the aquatic life that would be pro-

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[1]To produce energy, industrial powerplants withdraw billions of gallons of water daily from our Nation's waterways. Thermoelectric powerplants alone demand 39 percent of all freshwater withdrawn nationwide. See Dept. of Energy, Addressing the Critical Link Between Fossil Energy and Water 2 (Oct. 2005), http://www.netl.doe.gov/technologies/coalpower/ewr/pubs/NETL_Water_Paper_Final_Oct.2005.pdf (all Internet materials as visited Mar. 18, 2009, and available in Clerk of Court's case file). The fish and shellfish are killed by "impingement" or "entrainment." Impingement occurs when aquatic organisms are trapped against the screens and grills of water intake structures. Entrainment occurs when these organisms are drawn into the intake structures. See *Riverkeeper, Inc.* v. *EPA*, 475 F. 3d 83, 89 (CA2 2007); 69 Fed. Reg. 41586 (2004).

tected under its §316(b) regulations, *id.*, at 41661. To compensate, the EPA took a shortcut: Instead of monetizing all aquatic life, the Agency counted only those species that are commercially or recreationally harvested, a tiny slice (1.8 percent to be precise) of all impacted fish and shellfish. This narrow focus in turn skewed the Agency's calculation of benefits. When the EPA attempted to value all aquatic life, the benefits measured $735 million.[2] But when the EPA decided to give zero value to the 98.2 percent of fish not commercially or recreationally harvested, the benefits calculation dropped dramatically—to $83 million. *Id.*, at 41666. The Agency acknowledged that its failure to monetize the other 98.2 percent of affected species "'could result in serious misallocation of resources,'" *id.*, at 41660, because its "comparison of complete costs and incomplete benefits does not provide an accurate picture of net benefits to society."[3]

Because benefits can be more accurately monetized in some industries than in others, Congress typically decides whether it is appropriate for an agency to use cost-benefit analysis in crafting regulations. Indeed, this Court has recognized that "[w]hen Congress has intended that an agency engage in cost-benefit analysis, it has clearly indicated such intent on the face of the statute." *American Textile Mfrs. Institute, Inc.* v. *Donovan*, 452 U. S. 490, 510 (1981). Accordingly, we should not treat a provision's silence as an implicit source of cost-benefit authority, particularly when such authority is elsewhere expressly granted and it has the potential to fundamentally alter an

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[2]EPA, Economic and Benefits Analysis for the Proposed Section 316(b) Phase II Existing Facilities Rule, p. D1–4 (EPA–821–R–02–001, Feb. 2002), http://www.epa.gov/waterscience/316b/phase2/econbenefits.

[3]EPA, Economic and Benefits Analysis for the Final Section 316(b) Phase II Existing Facilities Rule, p. D1–5 (EPA–821–R–04–005, Feb. 2004), http://www.epa.gov/waterscience/316b/phase2/econbenefits/final.htm.

agency's approach to regulation. Congress, we have noted, "does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes." *Whitman* v. *American Trucking Assns., Inc.*, 531 U. S. 457, 467–468 (2001).

When interpreting statutory silence in the past, we have sought guidance from a statute's other provisions. Evidence that Congress confronted an issue in some parts of a statute, while leaving it unaddressed in others, can demonstrate that Congress meant its silence to be decisive. We concluded as much in *American Trucking*. In that case, the Court reviewed the EPA's claim that §109 of the Clean Air Act (CAA), 42 U. S. C. §7409(a) (2000 ed.), authorized the Agency to consider implementation costs in setting ambient air quality standards. We read §109, which was silent on the matter, to prohibit Agency reliance on cost considerations. After examining other provisions in which Congress had given the Agency authority to consider costs, the Court "refused to find implicit in ambiguous sections of the CAA an authorization to consider costs that has elsewhere, and so often, been expressly granted." 531 U. S., at 467. Studied silence, we thus concluded, can be as much a prohibition as an explicit "no."

Further motivating the Court in *American Trucking* was the fact that incorporating implementation costs into the Agency's calculus risked countermanding Congress' decision to protect public health. The cost of implementation, we said, "is *both* so indirectly related to public health *and* so full of potential for canceling the conclusions drawn from direct health effects that it would surely have been expressly mentioned in [the text] had Congress meant it to be considered." *Id.*, at 469.

American Trucking's approach should have guided the Court's reading of §316(b). Nowhere in the text of §316(b)

does Congress explicitly authorize the use of cost-benefit analysis as it does elsewhere in the CWA. And the use of cost-benefit analysis, like the consideration of implementation costs in *American Trucking*, "pad[s]" §316(b)'s environmental mandate with tangential economic efficiency concerns. *Id.*, at 468. Yet the majority fails to follow *American Trucking* despite that case's obvious relevance to our inquiry.

II

In 1972, Congress amended the CWA to strike a careful balance between the country's energy demands and its desire to protect the environment. The Act required industry to adopt increasingly advanced technology capable of mitigating its detrimental environmental impact. Not all point sources were subject to strict rules at once. Existing plants were granted time to retrofit with the best technology while new plants were required to incorporate such technology as a matter of design. Although Congress realized that technology standards would necessarily put some firms out of business, see *EPA* v. *National Crushed Stone Assn.*, 449 U. S. 64, 79 (1980), the statute's steady march was toward stricter rules and potentially higher costs.

Section §316(b) was an integral part of the statutory scheme. The provision instructs that "[a]ny standard established pursuant to section 1311 of this title or section 1316 of this title and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the *best technology available for minimizing adverse environmental impact.*" 33 U. S. C. §1326(b) (2006 ed.) (emphasis added).[4] The "best technology available," or "BTA," stan-

[4]The two cross-referenced provisions, §§1311 and 1316, also establish "best technology" standards, the first applicable to existing point sources and the second to new facilities. The reference to these provi-

dard delivers a clear command: To minimize the adverse environmental impact of water intake structures, the EPA must require industry to adopt the best technology available.

Based largely on the observation that §316(b)'s text offers little guidance and therefore delegates some amount of gap-filling authority to the EPA, the Court concludes that the Agency has discretion to rely on cost-benefit analysis. See *ante*, at 11–12. The Court assumes that, by not specifying how the EPA is to determine BTA, Congress intended to give considerable discretion to the EPA to decide how to proceed. Silence, in the majority's view, represents ambiguity and an invitation for the Agency to decide for itself which factors should govern its regulatory approach.

The appropriate analysis requires full consideration of the CWA's structure and legislative history to determine whether Congress contemplated cost-benefit analysis and, if so, under what circumstances it directed the EPA to utilize it. This approach reveals that Congress granted the EPA authority to use cost-benefit analysis in some contexts but not others, and that Congress intend to control, not delegate, when cost-benefit analysis should be used. See *Chevron U. S. A. Inc.* v. *Natural Resources Defense Council, Inc.*, 467 U. S. 837, 842–843 (1984).[5]

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sions in §316(b) merely requires any rule promulgated under those provisions, when applied to a point source with a water intake structure, to incorporate §316(b) standards.

[5]The majority announces at the outset that the EPA's reading of the BTA standard "governs if it is a reasonable interpretation of the statute—not necessarily the only possible interpretation, nor even the interpretation deemed *most* reasonable by the courts." *Ante*, at 7. This observation is puzzling in light of the commonly understood practice that, as a first step, we ask "whether Congress has directly spoken to the precise question at issue." *Chevron*, 467 U. S., at 842. Only later, if Congress' intent is not clear, do we consider the reasonableness of the agency's action. *Id.*, at 843. Assuming ambiguity and moving to the

Powerful evidence of Congress' decision not to authorize cost-benefit analysis in the BTA standard lies in the series of standards adopted to regulate the outflow, or effluent, from industrial powerplants. Passed at the same time as the BTA standard at issue here, the effluent limitation standards imposed increasingly strict technology requirements on industry. In each effluent limitation provision, Congress distinguished its willingness to allow the EPA to consider costs from its willingness to allow the Agency to conduct a cost-benefit analysis. And to the extent Congress permitted cost-benefit analysis, its use was intended to be temporary and exceptional.

The first tier of technology standards applied to existing plants—facilities for which retrofitting would be particularly costly. Congress required these plants to adopt "effluent limitations . . . which shall require the application of the best practicable control technology currently available." 33 U. S. C. §1311(b)(1)(A). Because this "best practicable," or "BPT," standard was meant to ease industry's transition to the new technology-based regime, Congress gave BPT two unique features: First, it would be temporary, remaining in effect only until July 1, 1983.[6] Second, it specified that the EPA was to conduct a cost-benefit analysis in setting BPT requirements by considering "the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application."[7] §1314(b)(1)(B). Permitting cost-benefit

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second step reflects the Court's reluctance to consider the possibility, which it later laments is "more complex," *ante*, at 9, that Congress' silence may have meant to foreclose cost-benefit analysis.

[6] Congress later extended the deadline to March 31, 1989.

[7] Senator Muskie, the Senate sponsor of the legislation, described the cost-benefit analysis permitted under BPT as decidedly narrow, asserting that "[t]he balancing test between total cost and effluent reduction benefits is intended to limit the application of technology only where the additional degree of effluent reduction is wholly out of proportion to the costs of achieving such marginal level of reduction for any class or

analysis in BPT gave the EPA the ability to cushion the new technology requirement. For a limited time, a technology with costs that exceeded its benefits would not be considered "best."

The second tier of technology standards required existing powerplants to adopt the "best available technology economically achievable" to advance "the national goal of eliminating the discharge of all pollutants." §1311(b)(2)(A). In setting this "best available technology," or "BAT,"[8] standard, Congress gave the EPA a notably different command for deciding what technology would qualify as "best": The EPA was to consider, among other factors, "the cost of achieving such effluent reduction," but Congress did not grant it authority to balance costs with the benefits of stricter regulation. §1314(b)(2)(B). Indeed, in *Crushed Stone* this Court explained that the difference between BPT and BAT was the existence of cost-benefit authority in the first and the absence of that authority in the second. See 449 U. S., at 71 ("Similar directions are given the Administrator for determining effluent reductions attainable from the BAT except that in assessing BAT total cost is no longer to be considered in comparison to effluent reduction benefits").

The BAT standard's legislative history strongly supports the view that Congress purposefully withheld cost-benefit authority for this tier of regulation. See *ibid.*, n. 10. The House of Representatives and the Senate split over the role cost-benefit analysis would play in the BAT provision. The House favored the tool, see H. R. Rep. No. 92–911, p. 107 (1972), 1 Leg. Hist. 794, while the Senate rejected it,

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category of sources." 1 Legislative History of the Water Pollution Control Act Amendments of 1972 (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress), Ser. No. 93–1, p. 170 (1973) (hereinafter Leg. Hist.)

[8] Although the majority calls this "BATEA," the parties refer to the provision as "BAT," and for simplicity, so will I.

see 2 *id.*, at 1183; *id.*, at 1132. The Senate view ultimately prevailed in the final legislation, resulting in a BAT standard that was "not subject to any test of cost in relation to effluent reduction benefits or any form of cost/benefit analysis." 3 Legislative History of the Clean Water Act of 1977: A Continuation of the Legislative History of the Federal Water Pollution Control Act (Committee Print compiled for the Senate Committee on Environment and Public Works by the Library of Congress), Ser. No. 95–14, p. 427 (1978).

The third and strictest regulatory tier was reserved for new point sources—facilities that could incorporate technology improvements into their initial design. These new facilities were required to adopt "the best available demonstrated control technology," or "BADT," which Congress described as "a standard . . . which reflect[s] the greatest degree of effluent reduction." §1316(a)(1). In administering BADT, Congress directed the EPA to consider "the cost of achieving such effluent reduction." §1316(b)(1)(B). But because BADT was meant to be the most stringent standard of all, Congress made no mention of cost-benefit analysis. Again, the silence was intentional. The House's version of BADT originally contained an exemption for point sources for which "the economic, social, and environmental costs bear no reasonable relationship to the economic, social, and environmental benefit to be obtained." 1 Leg. Hist. 798. That this exemption did not appear in the final legislation demonstrates that Congress considered, and rejected, reliance on cost-benefit analysis for BADT.

It is in this light that the BTA standard regulating water intake structures must be viewed. The use of cost-benefit analysis was a critical component of the CWA's structure and a key concern in the legislative process. We should therefore conclude that Congress intended to forbid cost-benefit analysis in one provision of the Act in which it

was silent on the matter when it expressly authorized its use in another.[9] See, *e.g.*, *Allison Engine Co.* v. *United States ex rel. Sanders*, 553 U. S. ___, ___ (2008) (slip op., at 7–8); *Russello* v. *United States*, 464 U. S. 16, 23 (1983) ("[W]here Congress includes particular language in one section of a statute but omits it in another . . . , it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion" (internal quotation marks omitted)). This is particularly true given Congress' decision that cost-benefit analysis would play a temporary and exceptional role in the CWA to help existing plants transition to the Act's ambitious environmental standards.[10] Allowing cost-benefit analysis in the BTA standard, a permanent mandate applicable to all powerplants, serves no such purpose and instead fundamentally

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[9]The Court argues that, if silence in §316(b) signals the prohibition of cost-benefit analysis, it must also foreclose the consideration of *all* other potentially relevant discretionary factors in setting BTA standards. *Ante*, at 12. This all-or-nothing reasoning rests on the deeply flawed assumption that Congress treated cost-benefit analysis as just one among many factors upon which the EPA could potentially rely to establish BTA. Yet, as explained above, the structure and legislative history of the CWA demonstrate that Congress viewed cost-benefit analysis with special skepticism and controlled its use accordingly. The Court's assumption of equivalence is thus plainly incorrect. Properly read, Congress' silence in §316(b) forbids reliance on the cost-benefit tool but does not foreclose reliance on all other considerations, such as a determination whether a technology is so costly that it is not "available" for industry to adopt.

[10]In 1977, Congress established an additional technology-based standard, commonly referred to as "best conventional pollutant control technology," or "BCT," to govern conventional pollutants previously covered by the BAT standard. See 33 U. S. C. §1311(b)(2)(E). The BCT standard required the EPA to consider, among other factors, "the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived." §1314(b)(4)(B). That Congress expressly authorized cost-benefit analysis in BCT further confirms that Congress treated cost-benefit analysis as exceptional and reserved for itself the authority to decide when it would be used in the Act.

weakens the provision's mandate.[11]

Accordingly, I would hold that the EPA is without authority to perform cost-benefit analysis in setting BTA standards. To the extent the EPA relied on cost-benefit analysis in establishing its BTA regulations,[12] that action was contrary to law, for Congress directly foreclosed such reliance in the statute itself.[13] *Chevron*, 467 U. S., at 843.

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[11] The Court attempts to cabin its holding by suggesting that a "rigorous form of cost-benefit analysis," such as the form "prescribed under the statute's former BPT standard," may not be permitted for setting BTA regulations. *Ante*, at 13. Thus the Court has effectively instructed the Agency that it can perform a cost-benefit analysis so long as it does not resemble the kind of cost-benefit analysis Congress elsewhere authorized in the CWA. The majority's suggested limit on the Agency's discretion can only be read as a concession that cost-benefit analysis, as typically performed, may be inconsistent with the BTA mandate.

[12] The "national performance standards" the EPA adopted were shaped by economic efficiency concerns at the expense of finding the technology that best minimizes adverse environmental impact. In its final rulemaking, the Agency declined to require industrial plants to adopt closed-cycle cooling technology, which by recirculating cooling water requires less water to be withdrawn and thus fewer aquatic organisms to be killed. *Riverkeeper, Inc.* v. *EPA*, 358 F. 3d 174, 182, n. 5 (CA2 2004); 69 Fed. Reg. 41601, and n. 44. This the Agency decided despite its acknowledgment that "closed-cycle, recirculating cooling systems . . . can reduce mortality from impingement by up to 98 percent and entrainment by up to 98 percent." *Id.*, at 41601. The EPA instead permitted individual plants to resort to a "suite" of options so long as the method used reduced impingement and entrainment by the more modest amount of 80 and 60 percent, respectively. See 40 CFR §125.94(b). The Agency also permitted individual plants to obtain a site-specific variance from the national performance standards if they could prove (1) that compliance costs would be "significantly greater than" those the Agency considered when establishing the standards, or (2) that compliance costs "would be significantly greater than the benefits of complying with the applicable performance standards," §125.94(a)(5).

[13] Thus, the Agency's past reliance on a "wholly disproportionate" standard, a mild variant of cost-benefit analysis, is irrelevant. See *ante*, at 14. Because "Congress has directly spoken to the precise

Because we granted certiorari to decide only whether the EPA has authority to conduct cost-benefit analysis, there is no need to define the universe of considerations upon which the EPA can properly rely in administering the BTA standard. I would leave it to the Agency to decide how to proceed in the first instance.

III

Because the Court unsettles the scheme Congress established, I respectfully dissent.

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question at issue," *Chevron*, 467 U. S., at 842, longstanding yet impermissible agency practice cannot ripen into permissible agency practice.